



---

Water-Data Report 2008

**02152474 FIRST BROAD RIVER AT LAWNDALE, NC**

Santee Basin  
Upper Broad Subbasin

LOCATION.--Lat 35°24'55", long 81°33'42" referenced to North American Datum of 1983, Cleveland County, NC, Hydrologic Unit 03050105, near center span on downstream side of bridge on North Carolina Highway 182 and 0.2 mi northeast of Lawndale.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--April 2008 to September 2008.

GAGE.--Water-stage recorder. Datum of gage is 800 ft above National Geodetic Vertical Datum of 1929. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

## Water-Data Report 2008

02152474 FIRST BROAD RIVER AT LAWNDALE, NC—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**  
**DAILY MEAN VALUES**  
[*e*, estimated]

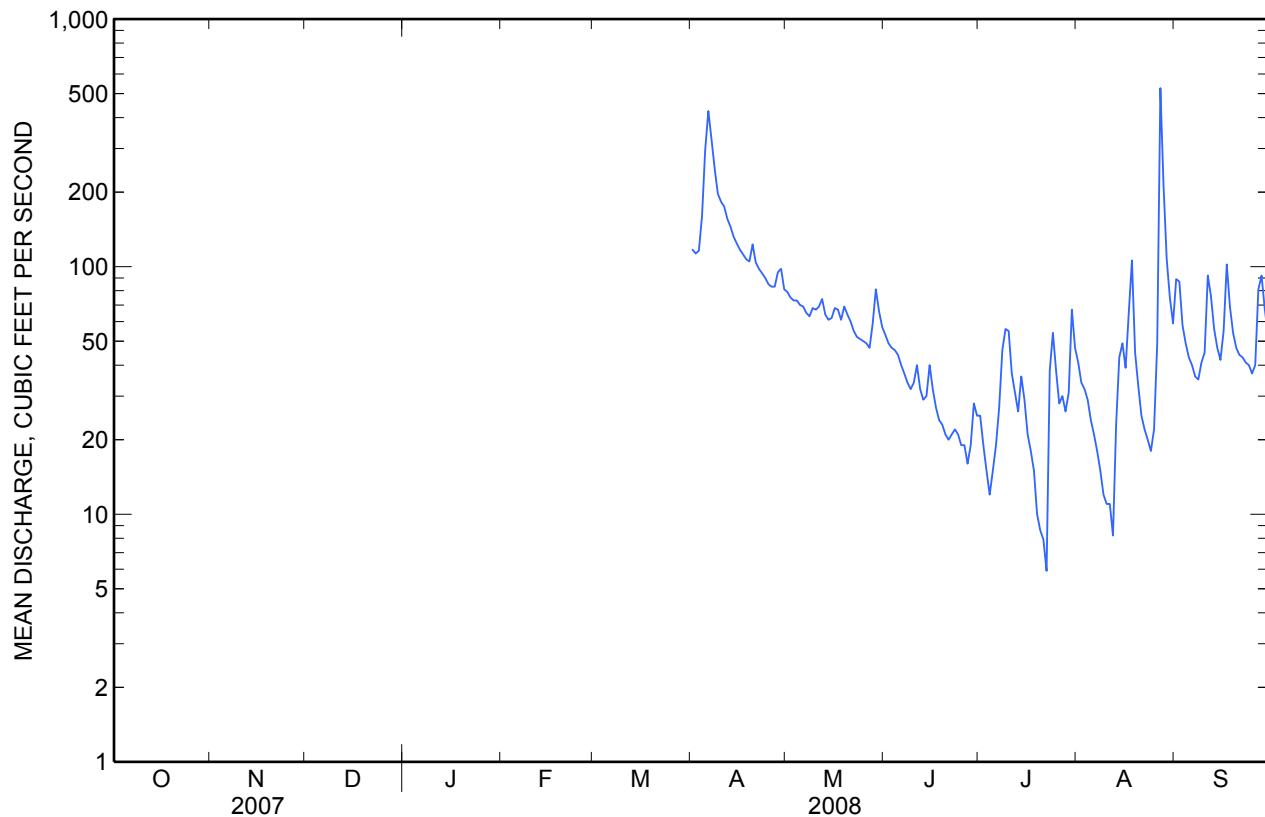
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	---	---	---	e117	79	53	25	41	89
2	---	---	---	---	---	---	e113	75	49	19	34	87
3	---	---	---	---	---	---	e116	73	47	15	32	58
4	---	---	---	---	---	---	e160	73	46	12	29	49
5	---	---	---	---	---	---	e295	70	44	15	24	43
6	---	---	---	---	---	---	e425	69	40	19	21	40
7	---	---	---	---	---	---	e327	65	37	27	18	36
8	---	---	---	---	---	---	e249	63	34	46	15	35
9	---	---	---	---	---	---	e197	68	32	56	12	41
10	---	---	---	---	---	---	e183	67	34	55	11	45
11	---	---	---	---	---	---	e175	69	40	37	11	92
12	---	---	---	---	---	---	156	74	32	31	8.2	76
13	---	---	---	---	---	---	145	64	29	26	23	56
14	---	---	---	---	---	---	132	61	30	36	43	47
15	---	---	---	---	---	---	124	62	40	29	49	42
16	---	---	---	---	---	---	117	68	32	21	39	55
17	---	---	---	---	---	---	112	67	27	18	65	102
18	---	---	---	---	---	---	107	61	24	15	106	69
19	---	---	---	---	---	---	105	69	23	10	45	54
20	---	---	---	---	---	---	123	64	21	8.6	33	47
21	---	---	---	---	---	---	104	60	20	7.9	25	44
22	---	---	---	---	---	---	98	55	21	5.9	22	43
23	---	---	---	---	---	---	94	52	22	38	20	41
24	---	---	---	---	---	---	90	51	21	54	18	40
25	---	---	---	---	---	---	85	50	19	38	22	37
26	---	---	---	---	---	---	83	49	19	28	49	40
27	---	---	---	---	---	---	83	47	16	30	526	81
28	---	---	---	---	---	---	95	59	19	26	212	92
29	---	---	---	---	---	---	98	81	28	31	107	68
30	---	---	---	---	---	---	81	66	25	67	75	53
31	---	---	---	---	---	---	---	57	---	47	59	---
<b>Mean</b>	---	---	---	---	---	---	146	64.1	30.8	28.8	57.9	56.7
<b>Max</b>	---	---	---	---	---	---	425	81	53	67	526	102
<b>Min</b>	---	---	---	---	---	---	81	47	16	5.9	8.2	35

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2008 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	---	---	---	---	---	---	146	64.1	30.8	28.8	57.9	56.7
<b>Max</b>	---	---	---	---	---	---	146	64.1	30.8	28.8	57.9	56.7
(WY)	(--)	(--)	(--)	(--)	(--)	(--)	(2008)	(2008)	(2008)	(2008)	(2008)	(2008)
<b>Min</b>	---	---	---	---	---	---	146	64.1	30.8	28.8	57.9	56.7
(WY)	(--)	(--)	(--)	(--)	(--)	(--)	(2008)	(2008)	(2008)	(2008)	(2008)	(2008)

**02152474 FIRST BROAD RIVER AT LAWNDALE, NC—Continued****SUMMARY STATISTICS**

<b>Water Year 2008</b>		
<b>Highest daily mean</b>	526	Aug 27
<b>Lowest daily mean</b>	5.9	Jul 22
<b>Annual seven-day minimum</b>	12	Jul 16
<b>Maximum peak flow</b>	790	Aug 27
<b>Maximum peak stage</b>	4.47	Aug 27
<b>Instantaneous low flow</b>	2.9	Jul 22



**02152474 FIRST BROAD RIVER AT LAWNDALE, NC—Continued**

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--March to September 2008.

REMARKS.--Station operated in cooperation with the Cleveland County Sanitary District to characterize the total sediment load in the First Broad River basin upstream of the proposed reservoir north of Lawndale and downstream of the proposed dam location.

## 02152474 FIRST BROAD RIVER AT LAWNDALE, NC—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**  
 Part 1 of 4  
 [QC, quality control sample]

Date	Time	Sample medium and type	Suspnd.	Sus-	Sus-	Loca-	Type
			Instan-	pened	sus-	X-sect.	of
			taneous	sedi-	pened	looking	sample
			dis-	concen-	dis-	dwnstrm	QA
			charge,	tration	charge,	ft from	data,
			cfs	mg/L	tons/d	I bank	code
			(00061)	(80154)	(80155)	(00009)	(99111)
<b>Mar</b>							
19...	1155	Surface water, regular	128	76	5	1.7	200
19...	1156	Surface water, regular	128	77	5	1.7	--
<b>Apr</b>							
25...	1456	Surface water, regular	78	79	4	.84	200
25...	1457	<i>QC - Surface water, replicate</i>	78	83	3	.63	200
28...	0919	Surface water, regular	91	95	7	1.7	200
29...	1430	Surface water, regular	97	94	5	1.3	200
<b>May</b>							
02...	1404	Surface water, regular	75	89	3	.61	200
06...	1354	Surface water, regular	69	79	4	.75	200
09...	1419	Surface water, regular	70	90	6	1.1	200
13...	1343	Surface water, regular	63	91	3	.51	200
16...	1339	Surface water, regular	69	96	7	1.3	200
20...	1412	Surface water, regular	62	93	4	.67	200
23...	1405	<i>QC - Surface water, replicate</i>	52	92	4	.56	200
23...	1407	Surface water, regular	52	92	4	.56	200
30...	1413	Surface water, regular	63	94	5	.85	200
<b>Jun</b>							
03...	1435	Surface water, regular	42	95	7	.78	200
06...	1429	Surface water, regular	39	88	6	.63	200
10...	1425	Surface water, regular	31	95	5	.42	200
13...	1338	Surface water, regular	29	--	5	.39	200
17...	1231	Surface water, regular	27	--	6	.43	200
20...	1335	Surface water, regular	20	--	5	.27	200
24...	1448	Surface water, regular	22	--	4	.24	200
27...	1325	Surface water, regular	13	--	13	.46	200
27...	1328	<i>QC - Surface water, replicate</i>	13	--	16	.56	200
<b>Jul</b>							
01...	1355	Surface water, regular	26	--	5	.35	200
04...	1542	Surface water, regular	11	--	3	.09	200
08...	1134	Surface water, regular	33	--	6	.53	200
15...	1110	Surface water, regular	28	--	7	.53	200
18...	1150	Surface water, regular	14	--	7	.26	200
22...	0847	Surface water, regular	5.9	--	8	.13	200
23...	0844	Surface water, regular	34	--	23	2.1	200
24...	0715	Surface water, regular	53	--	202	29	200
25...	0750	Surface water, regular	41	--	16	1.8	200
25...	0753	<i>QC - Surface water, replicate</i>	41	--	15	1.7	200
29...	0925	Surface water, regular	39	--	6	.63	200

**02152474 FIRST BROAD RIVER AT LAWNDALE, NC—Continued**

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2007 TO  
SEPTEMBER 2008**  
Part 2 of 4  
[QC, quality control sample]

Date	Type of repli- cate, code (99105)	Data base number	Medium code
<b>Mar</b>			
19...	--	01	WS
19...	--	01	WS
<b>Apr</b>			
25...	--	01	WS
25...	10.00	04	<i>WSQ</i>
28...	--	01	WS
29...	--	01	WS
<b>May</b>			
02...	--	01	WS
06...	--	01	WS
09...	--	01	WS
13...	--	01	WS
16...	--	01	WS
20...	--	01	WS
23...	10.00	04	<i>WSQ</i>
23...	--	01	WS
30...	--	01	WS
<b>Jun</b>			
03...	--	01	WS
06...	--	01	WS
10...	--	01	WS
13...	--	01	WS
17...	--	01	WS
20...	--	01	WS
24...	--	01	WS
27...	--	01	WS
27...	10.00	04	<i>WSQ</i>
<b>Jul</b>			
01...	--	01	WS
04...	--	01	WS
08...	--	01	WS
15...	--	01	WS
18...	--	01	WS
22...	--	01	WS
23...	--	01	WS
24...	--	01	WS
25...	--	01	WS
25...	10.00	04	<i>WSQ</i>
29...	--	01	WS

## 02152474 FIRST BROAD RIVER AT LAWNDALE, NC—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**  
 Part 3 of 4  
 [QC, quality control sample]

Date	Time	Sample medium and type	Suspnd.	Sus-	Sus-	Bedload	Bedload	Bedload
			Instan-	sedi-	sus-	sediment,	sediment,	sieve
			taneous	sieve	pended	sediment	sieve	sieve
			dis-	diametr	concen-	dis-	diametr	diametr
			charge,	percent	tration	charge,	percent	percent
			cfs	<.063mm	mg/L	tons/d	<.063mm	<.125mm
			(00061)	(70331)	(80154)	(80155)	(80226)	(80227)
<b>Aug</b>								
01...	1639	Surface water, regular	38	--	9	.92	--	--
05...	0826	Surface water, regular	24	--	10	.65	--	--
08...	0952	Surface water, regular	16	--	9	.39	--	--
12...	1044	Surface water, regular	8.8	--	3	.07	--	--
14...	0723	Surface water, regular	41	--	19	2.1	--	--
15...	0858	Surface water, regular	48	--	24	3.1	--	--
18...	0725	Surface water, regular	121	96	102	33	--	--
19...	1316	Surface water, regular	43	--	12	1.4	--	--
22...	1323	Surface water, regular	21	--	5	.28	--	--
22...	1330	QC - Surface water, replicate	21	--	9	.51	--	--
26...	0930	Surface water, regular	44	--	10	1.2	--	--
26...	0931	QC - Surface water, replicate	44	--	8	.95	--	--
26...	0932	Surface water, regular	44	--	8	.97	--	--
26...	0950	Surface water, regular	45	--	--	--	4	4
26...	1719	Surface water, regular	47	--	8	1.0	--	--
27...	0751	Surface water, regular	482	83	410	534	--	--
27...	1414	Surface water, regular	786	75	403	855	--	--
27...	1415	Surface water, regular	786	71	459	974	--	--
27...	1500	Surface water, regular	783	--	--	--	.0	1
28...	1149	Surface water, regular	191	93	56	29	--	--
29...	1445	Surface water, regular	104	93	19	5.3	--	--
<b>Sep</b>								
02...	0848	Surface water, regular	91	99	45	11	--	--
05...	1236	Surface water, regular	43	--	6	.70	--	--
09...	1018	Surface water, regular	38	--	5	.51	--	--
11...	0859	Surface water, regular	77	--	22	4.6	--	--
12...	1237	Surface water, regular	72	--	10	1.9	--	--
16...	1401	Surface water, regular	54	--	9	1.3	--	--
19...	1352	Surface water, regular	53	--	6	.86	--	--
23...	0856	Surface water, regular	41	--	4	.44	--	--
23...	0859	QC - Surface water, replicate	41	--	3	.33	--	--
26...	1040	Surface water, regular	36	--	5	.49	--	--
27...	1114	Surface water, regular	75	--	10	2.0	--	--
30...	1413	Surface water, regular	54	--	3	.44	--	--

## 02152474 FIRST BROAD RIVER AT LAWNDALE, NC—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**  
 Part 4 of 4  
 [QC, quality control sample]

Date	Bedload sediment, sieve diameter percent <5 mm (80229)	Bedload sediment, sieve diameter percent <1 mm (80230)	Bedload sediment, sieve diameter percent <2 mm (80231)	Bedload sediment, sieve diameter percent <4 mm (80232)	Bedload sediment, sieve diameter percent <8 mm (80233)	Bedload sediment, sieve diameter percent <16 mm (80234)	Loca- tion in X-sect. looking dwnstrm ft from I bank (00009)	Type of sample related to Sam- pling method, code (82398)	Type of QA data, code (99111)	Type of repli- cate, code (99105)	Data base number	Medium code
<b>Aug</b>												
01...	--	--	--	--	--	--	200	920	--	--	01	WS
05...	--	--	--	--	--	--	200	920	--	--	01	WS
08...	--	--	--	--	--	--	200	920	--	--	01	WS
12...	--	--	--	--	--	--	200	920	--	--	01	WS
14...	--	--	--	--	--	--	200	920	--	--	01	WS
15...	--	--	--	--	--	--	200	920	--	--	01	WS
18...	--	--	--	--	--	--	200	920	--	--	01	WS
19...	--	--	--	--	--	--	200	920	--	--	01	WS
22...	--	--	--	--	--	--	200	920	30	--	01	WS
22...	--	--	--	--	--	--	200	920	--	10.00	04	WSQ
26...	--	--	--	--	--	--	200	30	30	--	01	WS
26...	--	--	--	--	--	--	200	30	--	10.00	04	WSQ
26...	--	--	--	--	--	--	--	10	--	--	01	WS
26...	64	100	--	--	--	--	--	1000	--	--	01	WS
26...	--	--	--	--	--	--	200	920	--	--	01	WS
27...	--	--	--	--	--	--	200	920	--	--	01	WS
27...	--	--	--	--	--	--	200	30	--	--	01	WS
27...	--	--	--	--	--	--	--	10	--	--	01	WS
27...	20	42	69	89	100	100	--	1000	--	--	01	WS
28...	--	--	--	--	--	--	200	920	--	--	01	WS
29...	--	--	--	--	--	--	200	920	--	--	01	WS
<b>Sep</b>												
02...	--	--	--	--	--	--	200	920	--	--	01	WS
05...	--	--	--	--	--	--	200	920	--	--	01	WS
09...	--	--	--	--	--	--	200	920	--	--	01	WS
11...	--	--	--	--	--	--	200	920	--	--	01	WS
12...	--	--	--	--	--	--	200	920	--	--	01	WS
16...	--	--	--	--	--	--	200	920	--	--	01	WS
19...	--	--	--	--	--	--	200	920	--	--	01	WS
23...	--	--	--	--	--	--	200	920	--	--	01	WS
23...	--	--	--	--	--	--	200	920	--	--	04	WSQ
26...	--	--	--	--	--	--	200	920	--	--	01	WS
27...	--	--	--	--	--	--	200	920	--	--	01	WS
30...	--	--	--	--	--	--	200	920	--	--	01	WS